AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

194. (New) An isolated heteromeric receptor comprising at least one T1R2 polypeptide and at least one T1R3 polypeptide that specifically binds and/or which is activated by sweet taste stimuli.

195. (New) The isolated heteromeric receptor of claim 194, which is expressed by a recombinant host cell that contains T1R2 and T1R3 nucleic acid coding sequences.

196. (New) The isolated heteromeric receptor of claim 194, wherein said T1R2 polypeptide is selected from the group consisting of human, mouse and rat T1R2 and said T1R3 polypeptide is selected from the group consisting of human, mouse and rat T1R3.

197. (New) The isolated heteromeric receptor of claim 194, wherein said T1R2 and T1R3 are of different species origin.

198. (New) The isolated heteromeric receptor of claim 194, wherein said T1R2 and T1R3 polypeptide are of the same species origin.

199. (New) The isolated heteromeric receptor of claim 194, wherein said T1R2 polypeptide has the sequence contained in SEQ. ID. NO: 6.

200. (New) The isolated heteromeric receptor of claim 194, wherein said T1R2 receptor polypeptide has a sequence that possesses at least 90% sequence identity to the polypeptide contained in SEQ. ID. NO: 6.

201. (New) The isolated heteromeric receptor of claim 194, wherein said T1R2 receptor polypeptide has an amino acid sequence that possesses at least 95% sequence identity to the polypeptide contained in SEQ. ID. NO: 6.

202. (New) The isolated heteromeric receptor of claim 194, wherein said T1R2 receptor polypeptide has an amino acid sequence that possesses at least 96% sequence identity to the polypeptide contained in SEQ. ID. NO: 6.

203. (New) The isolated heteromeric receptor of claim 194, wherein said T1R2 receptor polypeptide has an amino acid sequence that possesses at least 97% sequence identity to the polypeptide contained in SEQ. ID. NO: 6.

204. (New) The isolated heteromeric receptor of claim 194, wherein said T1R2 receptor polypeptide has an amino acid sequence that possesses at least 98% sequence identity to the polypeptide contained in SEQ. ID. NO: 6.

205. (New) The isolated heteromeric receptor of claim 194, wherein said T1R2 receptor polypeptide has an amino acid sequence that possesses at least 99% sequence identity to the polypeptide contained in SEQ. ID. NO: 6.

206. (New) The isolated heteromeric receptor of claim 195, wherein said T1R2 polypeptide is encoded by the nucleic acid sequence contained in SEQ. ID. NO: 10.

207. (New) The isolated heteromeric receptor of claim 194, wherein said T1R2 polypeptide is encoded by a nucleic acid sequence that specifically hybridizes under stringent hybridization conditions to the nucleic acid sequence contained in SEQ. ID. NO: 10 or a fragment thereof that when expressed in association with a T1R3 polypeptide results in a T1R2/T1R3 heteromeric taste receptor that specifically binds and/or is activated by sweet taste stimuli.

208. (New) The isolated heteromeric receptor of claim 194, wherein said T1R2 is a fragment of the sequence contained in SEQ. ID. NO: 6 that when expressed in association with a T1R3 polypeptide results in a T1R2/T1R3 heteromeric taste receptor that specifically binds and/or is activated by sweet taste stimuli.

209. (New) The isolated heteromeric receptor of claim 194, wherein said T1R3 is a human T1R3 polypeptide having the sequence contained in SEQ. ID. NO: 7.

210. (New) The isolated heteromeric receptor of claim 194, wherein said T1R3 polypeptide is a human T1R3 polypeptide having at least 90% sequence identity to the polypeptide contained in SEQ. ID. NO: 7.

211. (New) The isolated heteromeric receptor of claim 194, wherein said T1R3 polypeptide is a human T1R3 polypeptide having at least 95% sequence identity to the polypeptide contained in SEQ. ID. NO: 7.

212. (New) The isolated heteromeric receptor of claim 194, wherein said T1R3 polypeptide is a human T1R3 polypeptide having at least 96% sequence identity to the polypeptide contained in SEQ. ID. NO: 7.

213. (New) The isolated heteromeric receptor of claim 194, wherein said T1R3 polypeptide is a human T1R3 polypeptide having at least 97% sequence identity to the polypeptide contained in SEQ. ID. NO: 7.

214. (New) The isolated heteromeric receptor of claim 194, wherein said T1R3 polypeptide is a human T1R3 polypeptide having at least 98% sequence identity to the polypeptide contained in SEQ. ID. NO: 7.

215. (New) The isolated heteromeric receptor of claim 194, wherein said T1R3 polypeptide is a human T1R3 polypeptide having at least 99% sequence identity to the polypeptide contained in SEQ. ID. NO: 7.

216. (New) The isolated heteromeric receptor of claim 195, wherein said T1R3 polypeptide is encoded by the nucleic acid sequence contained in SEQ. ID. NO: 9.

217. (New) The isolated heteromeric receptor of claim 195, wherein said T1R3 polypeptide is encoded by a nucleic acid sequence that specifically hybridizes to SEQ. ID. NO: 9 under stringent hybridization conditions or a fragment thereof that when expressed in association with T1R2 results in a heteromeric T1R2/T1R3 sweet taste receptor that specifically binds to and/or is activated by sweet taste stimuli.

218. (New) The isolated heteromeric receptor of claim 194 which is expressed by a recombinant host cell.

219. (New) The isolated heteromeric receptor of claim 194, wherein said cell is a mammalian, yeast, insect or amphibian cell.

220. (New) The isolated heteromeric receptor of claim 194 which is comprised in a membrane extract.

221. (New) The isolated heteromeric receptor of claim 194 which is comprised in a lipid bilayer.

222. (New) The isolated heteromeric receptor of claim 194 which is immobilized on a solid phase.

223. (New) The isolated heteromeric receptor of claim 194 which is attached to a detectable label.

224. (New) The isolated heteromeric receptor of claim 225, wherein said label is an enzyme, radionuclide, fluorophase or chemiluminescent compound.

225. (New) The isolated heteromeric receptor of claim 194 which further comprises a G protein.

226. (New) The isolated heteromeric receptor of claim 225, wherein said G protein is $G_{\alpha 15}$, $G_{\alpha 16}$ or transducin.

227. (New) The isolated heteromeric receptor of claim 194 which is bound to an antibody.

228. (New) The isolated heteromeric receptor of claim 194 which is in solution.

229. (New) The isolated heteromeric receptor of claim 194 which said T1R2 polypeptide comprises the amino acid sequence contained in SEQ. ID. NO: 6 and such T1R3 polypeptide comprises the sequence contained in SEQ. ID. NO. 7.